

USDA, SCS
Section II-E
Technical Guide
Area 4, Texas

SANDY LOAM

RANGE SITE DESCRIPTION

EE-56-64

0094041947X

Land Resource Area East Cross Timbers

Location Gainesville, Bonham, Sherman

Date 9/15/72

1. TOPOGRAPHY AND ELEVATION: This site occurs on gently sloping to moderately steep slopes with well defined swales and water courses. Slopes range from 0 to 8 percent but are dominantly 1 to 5 percent. Elevations range from about 400 to 800 feet.

2. SOILS:

a. These are well drained soils with loamy surfaces and loamy subsoils. These deep soils are moderately permeable with a high available water capacity. The depth and openness of the soils permit maximum penetration of grass roots and free intake of food and water.

b. Some soil taxonomic units which characterize this site are:

Galey fine sandy loam, loamy fine sand
Konawa fine sandy loam

3. CLIMAX VEGETATION:

a. The climax plant community is a postoak-blackjack oak savannah of tall and mid grasses. The oak overstory shades about 20 percent of the ground. An abundance of forb species enhances the beauty of the landscape as well as contributing to the food supply of various wildlife and domestic livestock. Little bluestem dominates the site making up 40-50 percent of the total annual yield.

RELATIVE PERCENTAGE					
Grasses	75%	Woody	20%	Forbs	5%
Little bluestem	45	Postoak, black-		Maxmilian sunflower	
Indiangrass	10	jack oak	15	Engelmann daisy	
Switchgrass		Elm		Tickclovers	
Beaked panicum	10	Greenbriar		Lespedezas	
Purpletop		Plums		Shoutbeans	
Sand lovegrass		Grapes		Wildbeans	5
Florida paspalum	5	Hawthorn	5	Catclaw sensitive-	
Canada, Virginia wildrye		American Beauty-		briar	
Tall dropseed		Berry		Yellow neptunia	
Silver bluestem		Elbowbush		Black samson	
Scribner panicum		Coralberry		Gaura	
Fringeleaf paspalum					
Purple lovegrass					
Woollysheath threeawn					
Carolina jointtail					
Sideoats grama					
Meadow dropseed					
Sedges					

- b. As retrogression occurs, big bluestem and sand lovegrass decrease rapidly followed by Indiangrass, little bluestem, perennial wildryes, beaked panicum, Florida paspalum and purpletop. Tall dropseed, sideoats grama, and silver bluestem increase initially and then decrease as retrogression continues. Continued deterioration of the site results in the oak overstory forming a dense canopy with an understory composed principally of low growing shrubs and vines. Common persimmon, sumac, winged elm, broom-sedge bluestem, osage orange, Splitbeard bluestem, yankeeweed, sand dropseed, splitbeard bluestem, and narrowleaf rushfoil often invade the site.
- c. Approximate total annual yield of this site in excellent condition ranges from 3500 pounds per acre in poor years to 6500 pounds per acre of air-dry vegetation in good years.
4. WILDLIFE NATIVE TO THE SITE: Deer, dove and quail inhabit this site. An abundant variety of woody and heraceous vegetation supplies food and cover for game birds and animals as well as habitat for other wildlife.
5. GUIDE TO INITIAL STOCKING RATE:

A. Condition Class	Climax Vegetation	Ac/AU/YL
Excellent	76-100	3-10
Good	51-75	9-13
Fair	26-50	11-17
Poor	0-25	15-24

b. Introduced Species

Species	Percent of the Area Established			
	<u>100-76</u>	<u>75-51</u>	<u>50-26</u>	<u>25-0</u>
Native lovegrass	6-0	8-12	12-17	17+
Common bermudagrass	6-0	8-12	12-20	20+

RELATIVE FORAGE QUALITY OF SPECIES 1/

a. Cattle

<u>Primary 2/</u>	<u>Secondary 3/</u>	<u>Low Value 4/</u>
Big bluestem	Tall dropseed	Buffalograss
Sand lovegrass	Silver bluestem	Red lovegrass
Indian grass	Purple lovegrass	Tumble windmillgrass
Florida paspalum	Carolina jointtail	Eromesedge bluestem
Little bluestem	Sideoats grama	Splitbeard bluestem
Beaked panicum	Sedges	Red threeawn
Canada, Virginia wildrye	Woollysheath threeawn	Sand dropseed
Purpletop	Scribner panicum	Western ragweed
Maximilian sunflower	Fringeleaf paspalum	Yankee-weed
	Catclaw sensitive briar	Curlycup gumweed
	Yellow neptunia	Narrowleaf rushfoil
		Common persimmon
		Winged elm
		Osage orange
		Flameleaf sumac

b. Dove and Quail 5/

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Western ragweed	Wildbeans	Fluffy-seeded grasses
Crotons	Gaura	Threeawns
Dewberries		Sneezeweeds
Partridge pea		
Maximilian sunflower		
Engelmann daisy		
Catclaw sensitive briar		
Tickclovers		

c. Deer

<u>Primary</u>	<u>Secondary</u>	<u>Low Value</u>
Oak mast	American beautyberry	Eastern redcedar
Greenbriar	Ela	Beebalm
Tickclovers	Hawthorns	Western ragweed
	Oak buds & twigs	Partridge senna
	Lespedezas	Prickly poppy
	Elbowbush	Common persimmon

- 1/ This plant rating system gives guidance on animal preference for plant species as well as indicating competition between kinds of animals for various plants. Grazing preference does not necessarily reflect a plant's ecological place in the climax plant community. Grazing preferences change depending upon the animal; upon plant palatability and nutritive value, stage of growth, season of use relative abundance, availability and plant associations.
- 2/ These species generally decrease under prolonged heavy grazing use.
- 3/ These plants usually increase initially, then decrease under prolonged heavy grazing use.
- 4/ These plants continue to increase with prolonged heavy grazing use.
- 5/ For these species the terms primary, secondary and low value indicate bird preference only. They do not indicate plant response to feeding pressure; nor do they have any ecological significance.

APPROVED:

John H. Bradley

AREA CONSERVATIONIST

9/25/72

DATE

Joe B. Norris

FIELD SPECIALIST - RANGE

9/25/72

DATE